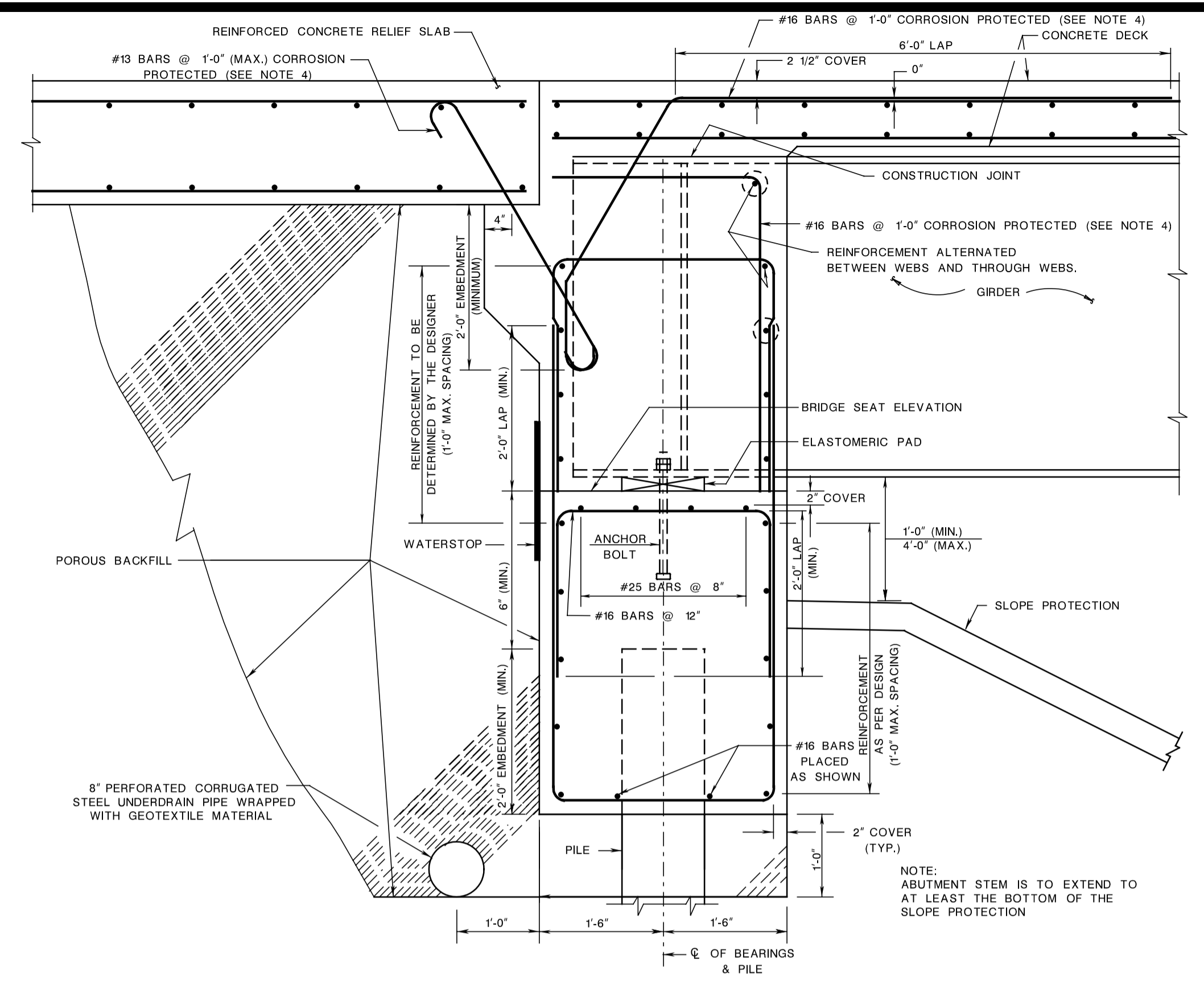


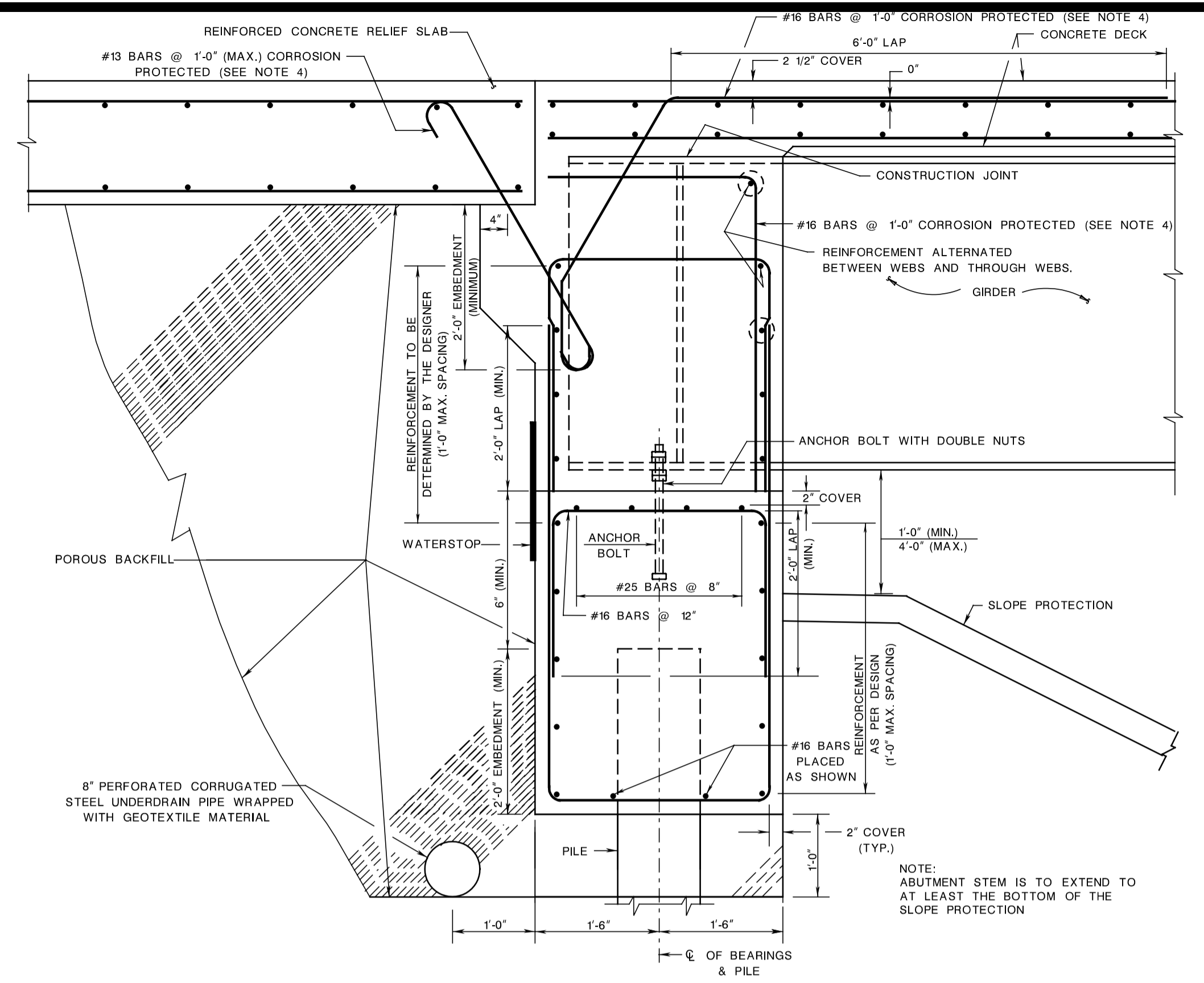
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|----------------|---------------------|-------|--------------|
| STATE | FEDERAL PROJECT NO. | SHEET | TOTAL SHEETS |
| N. J. | | | |
| STRUCTURE NO. | | | |
| STRUCTURE NAME | | | |



**INTEGRAL ABUTMENT DETAIL
STEEL GIRDER ANCHORED TO PILE CAP
AND RESTING ON ELASTOMERIC PAD**

INTEGRAL ABUTMENT CONSTRUCTION PROCEDURE

- FOR BRIDGE LENGTHS OVER 100 FT. PRE-EXCAVATE TO A DEPTH OF 8 FT. BELOW THE STEM AT THE DIAMETER SPECIFIED IN THE FOUNDATION DESIGN REPORT.
- DRIVE THE PILES AND CUT OFF PILES AT ELEVATIONS SHOWN.
- BACKFILL HOLES WITH DESIGNATION I-8 SAND.
- IF CIP PILES ARE USED, FILL THE SHELL WITH CONCRETE.
- PLACE THE ABUTMENT STEM CONCRETE TO REQUIRED BRIDGE SEAT ELEVATION WITH ANCHOR BOLTS IN PLACE. POUR THE PILE CAPS FOR THE WING WALLS CONCURRENTLY.
- SET THE ELASTOMERIC PAD ON THE ABUTMENT WITH THE ANCHOR BOLTS PASSING THROUGH THEM. SET THE BEAMS AND ANCHOR THEM TO THE ABUTMENT USING SLOTTED HOLES IN THE BOTTOM FLANGE. DO NOT FULLY TIGHTEN THE ANCHOR NUTS AT THIS TIME.
- POUR THE BRIDGE DECK EXCLUDING THE ABUTMENT BACKWALL/DIAPHRAGM AND THE LAST PORTION OF THE BRIDGE DECK EQUAL TO THE BACKWALL/DIAPHRAGM WIDTH.
- TIGHTEN THE ANCHOR NUTS AND POUR THE ABUTMENT BACKWALL/DIAPHRAGM FULL HEIGHT AND THE REMAINDER OF THE DECK SLAB. THE WING WALLS MAY ALSO BE POURED CONCURRENTLY.
- PLACE THE DRAIN SYSTEM AND BACKFILL IN 6" LIFTS UNTILL THE DESIRED SUBGRADE ELEVATION IS REACHED.
- POUR THE RELIEF SLAB STARTING AT THE END AWAY FROM THE ABUTMENT AND PROGRESSING TOWARD THE BACKWALL.



**INTEGRAL ABUTMENT DETAIL
STEEL GIRDER ANCHORED TO PILE CAP
AND RESTING ON NUTS**

INTEGRAL ABUTMENT CONSTRUCTION PROCEDURE

- FOR BRIDGE LENGTHS OVER 100 FT. PRE-EXCAVATE HOLES TO A DEPTH OF 8 FT. BELOW THE STEM AT THE DIAMETER SPECIFIED IN THE FOUNDATION DESIGN REPORT.
- DRIVE THE PILES AND CUT OFF PILES AT ELEVATIONS SHOWN.
- BACKFILL HOLES WITH DESIGNATION I-8 SAND.
- IF CIP PILES ARE USED, FILL THE SHELL WITH CONCRETE.
- PLACE THE ABUTMENT STEM CONCRETE TO REQUIRED BRIDGE SEAT ELEVATION WITH ANCHOR BOLTS IN PLACE. POUR THE PILE CAPS FOR THE WING WALLS CONCURRENTLY.
- SET THE BEAMS ON NUTS AT THE DESIRED LEVELS AND ANCHOR THEM TO THE ABUTMENT USING SLOTTED HOLES IN THE BOTTOM FLANGE. DO NOT FULLY TIGHTEN THE ANCHOR NUTS AT THIS TIME.
- POUR THE BRIDGE DECK EXCLUDING THE ABUTMENT BACKWALL/DIAPHRAGM AND THE LAST PORTION OF THE BRIDGE DECK EQUAL TO THE BACKWALL/DIAPHRAGM WIDTH.
- TIGHTEN THE ANCHOR NUTS AND POUR THE ABUTMENT BACKWALL/DIAPHRAGM FULL HEIGHT AND THE REMAINDER OF THE DECK SLAB. THE WING WALLS MAY ALSO BE POURED CONCURRENTLY.
- PLACE THE DRAIN SYSTEM AND BACKFILL IN 6" LIFTS UNTILL THE DESIRED SUBGRADE ELEVATION IS REACHED.
- POUR THE RELIEF SLAB STARTING AT THE END AWAY FROM THE ABUTMENT AND PROGRESSING TOWARD THE BACKWALL.

GENERAL NOTES

- DIAMETER OF AUGERED HOLE SHALL BE TWICE THE SIZE OF THE PILE.
- CUSHION SAND SHALL BE DESIGNATION I-8 SAND ACCORDING TO SUBSECTION 901.09 OF THE STANDARD SPECIFICATIONS.
- COST OF PREBORING, USE OF CASING IF REQUIRED TO SHORE UP HOLES AND PROVISION OF CUSHION SAND SHALL BE INCLUDED IN THE UNIT PRICE OF THE PILE ITEM.
- REFER TO SECTION 26 OF THIS MANUAL FOR TYPES OF CORROSION PROTECTED REINFORCEMENT STEEL THAT CAN BE USED)

NOTE TO DESIGNER:

DETAILS INCLUDED WITHIN THIS DRAWING MAY BE UTILIZED IN PREPARING CONTRACT PLANS. HOWEVER, IN CONFORMANCE WITH THE PROVISIONS OF SECTION 15 OF THIS MANUAL, ALTERNATIVE DETAILING MAY BE PROVIDED.

| | |
|-----------------|---------|
| CONTROL SECTION | JOB NO. |
| DES. BY | CHK. BY |
| DWN. BY | CHK. BY |
| EST. BY | CHK. BY |
| SPECS. BY | |
| IN CHARGE OF | |

BDC04MB-01

STANDARD DRAWING PLATE 2.9-2

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF STRUCTURAL ENGINEERING

**INTEGRAL ABUTMENTS FOR
STEEL SUPERSTRUCTURE - 2 OF 2**

ROUTE : SECTION :

MUNICIPALITY COUNTY

SCALE : NONE

BRIDGE SHEET NO. OF

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